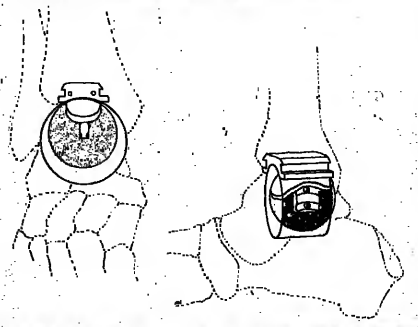
Med Trib 17

Medical Tribune and Medical News

© 1975 Medical Tribune, Inc

Vol. 16, No. 17 — world news of medicine and its practice—fast, accurate, complete — Wednesday, May 7, 1975

New Polyethylene-Vitallium Prosthesis



Ankle joint prosthesis developed by Dr. St. Elmo Newton has tibial unit made of cylindrical section of polyethylene and talar unit made of spherical section of Vitallium with slightly smaller radius. Arthropinsty has shown encouraging results so far in arthritic patients who would have been candidates for ankle fusion.

Artificial Ankle Seen Better Than Fusion in Some Cases

Medical Tribune Report

SAN FRANCISCO—Total ankle arthroplasty may be preferable to fusion in patients with degenerative and rheumatoid arthritis and avascular necrosis of the talus, Dr. St. Elmo Newton of the Seattle Orthopaedic and Fracture Clinic told a meeting of the American Academy of Orthopaedic Surgeons here.

Dr. Newton used a prosthesis of high density polyethylene and Vitallium to replace the ankle joint in 30 patients suffering from severe pain and immobility, who would all have been considered candidates for ankle fusion. He noted that fusion operations have been reported to result in a significant incidence of non-union, infection, loss of position, and need for repeated surgery.

Preliminary data on the patients undergoing total arthroplasty over the past two years are "very encouraging," Dr. Newton said, both in terms of relief from pain and preservation of motion.

Continued on page 2

Shock Correction of Heart Rhythm Delayed in 3% Up to 103 Seconds

By HARRIET PAGE
Medical Tribune Staff

SAN FRANCISCO—Conversion to normal sinus rhythm after DC shock for converting supraventricular arrhythmias may occur after a delay of up to two minutes, the 56th annual meeting of the American College of Physicians was told here. Drs. Wolf F. C. Duvernoy and Daniel T. Anbe, of the Division of Cardiovascular Disease at Henry Ford Hospital in Detroit, said they encountered six such cases out of a total of 203 consecutive patients.

While the exact mechanism of the delayed conversion is unclear, Dr. Duvernoy said, "we conclude that a repeat shock should not be administered immediately after apparent failure to establish normal sinus rhythm with direct current shock."

The six patients they saw with delayed conversion, Dr. Duvernoy said, took from four to 103 seconds after DC shock to convert to normal sinus rhythm. Their ages ranged from 36 to 63 and all were men.

Four had paroxysmal atrial flutter, two had atrial fibrillation, three had no demonstrable underlying organic heart disease, one had questionable alcoholic cardiomyopathy, and for one no diagnosis was available. Three patients received a shock of 50 watt-seconds and three of 100 watt-seconds. The immediate postshock rhythm was atrial fibrillation in all six patients, which then

Continued on page 12

Nationwide Use Effective

Rubella Vaccine Breaks 6-9-Year Epidemic Cycle

By FRANCES GOODNIGHT
Medical Tribune Staff

NEW YORK—This country's cycle of rubella epidemics now seems to have been broken by nationwide use of rubella vaccine, Dr. Louis Z. Cooper, of the Columbia University College of Physicians and Surgeons, said here.

Dr. Cooper, a key figure in congenital rubella research, said the nonappearance of an epidemic expected during the early 1970s marked the first disruption of the disease's usual six-to-nine-year epidemic cycles since compilation of rubella statistics began in this city 45 years ago.

National records have been kept for a much shorter period but the investigator believes the New York City records parallel those of the United States as a whole. He noted that the last epidemic, striking in 1964, resulted in the birth of at least 20,000 severely affected infants.

Dr. Cooper warned, however, that vaccination programs are still failing to reach many children.

Current figures indicate that only 60 per cent of children aged one to four and 80 per cent of those between the ages of five and nine are immunized, Dr. Cooper told a symposium on infections of the fetus and newborn held

Continued on page 18

Mayo Investigator Stresses Rauwolfia Study's Limitation

Medical Tribune Report

NEW YORK—In a MEDICAL TRIBUNE followup telephone interview, Dr. W. M. O'Fallon of the Mayo Clinic clarified and amplified earlier reports of the study which he and his colleagues conducted to ascertain whether rauwolfia derivatives such as reserpine were associated with breast cancer. Their study did not support such a relationship and was reported at the American Heart Association Council on Epidemiology meeting in Tampa (MT, April 9).

The interview with Dr. O'Fallon followed presentation of a summary of the Mayo data by Dr. Manning Feinleib at the March 24 meeting of the H.E.W. Ad Hoc committee in Bethesda to consider this risk. The committee agreed that further data was needed before any conclusion could be reached.

A retrospective case control study, the Mayo research initially compared 449 Minnesota women with breast cancer with a matched control group of

Continued on page 20

making rounds at press time

DEFINITION OF DEATH may be changed in New York to include cessation of brain function. Proposed law being considered by Health Committee of state legislature and supported by N.Y. County medical society and Manhattan district attorney would give surgeons right to remove organs for transplant when brain activity ceases. Present common law requires cessation of heartbeat, is said by reformers to be outmoded. Four states have passed brain death statutes so far, fourteen are studying similar measures.

INDIANA MALPRACTICE bill (MT April 23) is now law following signature by Gov. Otis R. Bowen, himself an MD. "We think we have the best, most comprehensive bill in any state," Dr. Bowen said, "Of course you have to see it in operation before you really know what you have." Dr. Paul F. Miller, co-chairman of state medical association committee for the bill, added, "We already have a commission to study reports from insurance companies in depth for the next year and a half, so that any changes we need can be made promptly."

LIMB MUSCLE TRANSPLANT — U. of Michigan team reports successful free transplants in cats of muscle from one limb to same site on opposite leg, with restoration of up to 50% of normal nontransplanted mass and 30% of muscle's contractile tension. Success depends on deservation of muscle about 3 weeks before transplantation, investigators say. Muscles not denervated until time of transplant regenerated far more slowly (if at all) and regained much less functional ability.

Same Catheter Used for Angiography, Embolization

Blood flow to kidney tumor can be reduced or halted by inserting gelatin sponge at a point in artery feeding the tumor. Embolization is performed following angiography to outline vessel pattern, and is done through same catheter used for the angiography. At left, angiogram of kidney. At right, blood supply is cut off following placement of the artificial embolus. Embolization can be performed prior to resection of the tumor to reduce tumor vascularity, according to Dr. Wallace, or to reduce tumor size, or as a palliative measure to reduce pain and hematuria.

New Techniques Pave Way For 'Intervention Radiology'

By MICHAEL HERRING
Medical Tribune Staff

NEW YORK—With new radiologic techniques and instrumentation for detecting, localizing, and treating cancer and other diseases, the radiologist has changed his image from "the person behind the red goggles to an activist in patient management," Dr. Sidney Wallace told a forum of the American College of Radiology here.

In an interview with MEDICAL TRIBUNE, Dr. Wallace, who is Professor of Radiology at University of Texas System Cancer Center, and M. D. Anderson Hospital and Tumor Institute, Houston, described the emerging field of "intervention radiology."

Stopping Internal Bleeding

With the image intensifier, the radiologist now has the ability to stop bleeding from tumors and other internal bleeding sites by various catheter procedures, without opening up the body, he said. "After identifying bleeding vessels with angiography, we can use the catheter to inject vasopressin, angiotensin, and other agents that constrict vessels. This we do to stop bleeding after surgical removal of polyps, for example.

"Bleeding stomach lymphomas have been similarly occluded using the patient's own body tissue. Emboli and gelfoam are very good preoperative measures for vascular tumors such as those of the kidney," he added. "By occluding these before surgery, we present the surgeon with a relatively bloodless field, which saves operating time, prevents blood loss, and defines the tumor better."

Dr. Wallace also described catheter insertion of a plug to stop the shunt of blood in patent ductus arteriosus without surgery. "In France, meningiomas and other spinal malformations have also been occluded by the radiologist prior to surgery," he said. "And in Russia, the catheter has been used to inflate a small balloon within the fistula between the carotid artery and cavernous sinus caused by trauma to the head."

Radiologists are also involved in dilation and removal of obstructions, Dr. Wallace added. "Dilating catheters are being used for opening occluded arteries by stretching the lumen of the vessel," he noted.

"In nonthrombotic mesenteric ischemia caused by shock or digitalis toxicity from heart failure treatment, the catheter can drip dilating drugs directly into the spastic vessels that are compromising the bowel."

The radiologist can also remove gallstones still remaining in the biliary ducts after gallbladder surgery, Dr. Wallace said. "These are either crushed with a special catheter or pushed into the duodenum," he explained.

"Formerly the province of the surgeon, bone and lung biopsies are another new area for the radiologist, who can now see where he is going without cutting. We use the same procedures for obtaining a bronchial brushing for cytologic examination, except that the catheter is equipped with a small brush for obtaining the specimen."

Radiologically-guided retroperitoneal lymph node biopsies may be possible in the near future, he stated. "We have already tried this on cadavers and are now working on a means to control the biopsy instrument better, to avoid rupturing nearby blood vessels.

Apartheid Reported Affecting All Phases of Health Services

Medical Tribune World Service

GENEVA—Racial discrimination affects virtually every aspect of South Africa's health services, according to a World Health Organization report on the health implications of apartheid.

The report, prepared by a group of experts for the W.H.O. Executive Board, pointed out, for example, that while the physician-population density for whites, at 1:400, is one of the world's highest, the ratio for Africans, who constitute 70 per cent of the population, is 1:44,400, one of the world's lowest.

Apartheid also applies to salary scales for physicians, with different pay scales according to ethnic origins for doctors with equivalent training and other qualifications, the W.H.O. experts continued. African physicians not only suffer from salary differentials, but are also denied the senior appointments, married quarters, travel allowances, and recreation facilities available to white doctors.

The system of delivering health care "is in flagrant contradiction with the system of ethical values that has prevailed in the medical profession since Hippocratic times," the report commented.

May Not Treat Own Patients

Black doctors are not allowed to treat their own patients in provincial hospitals if this would involve their being placed in a position of authority over white nurses. Ambulances for whites cannot be used to transport nonwhites.

A visitor to pediatric units in Johannesburg saw two nurses in the African hospital attempting to feed, change, and care for 37 very ill children, while in a comparable white hospital two nurses were caring for five children who were less ill. He reported that medical services could not cope with the magnitude of disease created by the conditions in which the African and Colored communities were living.

Racial attitudes extend even to the labeling of human blood collected for transfusion, the report said. Under official regulations, the code letters W for whites, K for coloreds, A for Indians or Asiatics, and B for Bantus must be used. No explanation of the purpose of the labeling is to be found in the regulation, which contains no prohibition on interracial blood transfusion.

Studies showing that there is no serogenetic reason for such labeling have not been challenged by the authorities, but a physician attached to the South Africa Blood Transfusion Service has defended the system on the ground that "in South Africa at the present time all the principal diseases which may be transmitted by transfusion (syphilis, viral hepatitis, and malaria) have higher incidences in nonwhites than in whites." He added that white donors are to be preferred "because of their greater freedom from infectious diseases as a consequence of better socioeconomic and living conditions."

The Medical Association of South Africa has consistently opposed racial discrimination, the report stated. Its federal council has called on the authorities to remove the differential salary structure, and this stand has been backed by editorials in the *South African Medical Journal*. The Medical Association although predominantly white, does not itself practice apartheid, and has officeholders of various ethnic groups.

Dead Sea Region 'Ideal' For Psoriasis Treatment

Medical Tribune World Service

TEL AVIV—The Dead Sea region offers an ideal location for the natural treatment of psoriasis by the sun's ultraviolet rays, according to Dr. Anthony Domonkos, Clinical Professor of Dermatology at Columbia University College of Physicians and Surgeons.

Dr. Domonkos headed a delegation of 13 dermatologists from the United States who examined new facilities for skin patients established at the Dead Sea.

The region's elevation, 1,300 feet below sea level, provides a unique degree of atmospheric filtration of the sun rays, he noted.

Artificial Ankle Held Better Than Fusion In Certain Patients

Continued from page 1

The two-part prosthesis fits into the tibia and talus and is bonded to the cancellous bone by methylmethacrylate. The talus is not resected. Dr. Newton said that when the unit is in place it allows polycentric motion—gliding and rocking as well as rotation, which is a marked advantage over fusion.

Of the patients in whom the prosthesis was inserted, 19 had degenerative arthritis, eight rheumatoid arthritis, two avascular necrosis of the talus, and one pseudoarthrosis of ankle fusion. The average hospital stay was five to seven days, and full weight on the joint was tolerated on the third day.

The average post-op range of motion was five degrees dorsiflexion and 25 degrees plantarflexion. Significant relief from pain was obtained in all but three cases, though "not all have had complete relief," Dr. Newton said.

The three failures in the group involved one fractured distal fibula developing nonunion requiring amputation, one persistent post-op painful valgus, and one infection requiring fusion.

"The prosthetic ankle replacement is recommended at this time only for those patients whose ankle pain is of such severity that fusion would be the only other surgical treatment possible," Dr. Newton said. "It is contraindicated in the face of recent infection, Charcot joint, absent malleolus, or marked ligamentous instability."

index

CLINICAL NEWS NOTE: *"A solid ankle fusion places an additional strain on the knee and tarsal joints on that same side. If problems exist in these joints, as in rheumatoid arthritis, this added strain causes their symptoms to become steadily worse. . . . To relieve pain, yet retain motion in the arthritic ankle, an ankle replacement prosthesis was designed and has been inserted into a small series of patients with very encouraging results." (Dr. St. Elmo Newton, see page 1.)*

feature index

Medical Tribune

CHRIS WOODBURY, Ph.D.
General Manager
HARRY HENDERSON *Editor-in-Chief* · RICHARD GUBNER, M.D. *Associate Editor*
R. S. GRIMSHAW, JR. *Executive News Editor* · HARRIET PAGE *Special News Editor*
WILLIAM PRIFTIS *Art Supervisor* · NIKKI FROST *Picture Editor*

ARTHUR M. SACKLER, M.D.
International Publisher

Advisory Board
JOHN ADRIANI, M.D. • RENÉ J. DUBOS, PH.D.
JULES H. MASSERMAN, M.D. •
BERNARD LOWN, M.D. •
ALBERT B. SABIN, M.D. •
ALTON OCHSNER, M.D. •
ROBERT A. CHASE, M.D. •
LEO G. RIGLER, M.D. •

880 Third Avenue, New York, N.Y., 10022
• Telephone: 421-4000
Circulation audited by Business Publications Audit of Circulation, Inc.

MEDICAL TRIBUNE *is published each Wednesday except on April 30, July 30, Oct. 29 and Dec. 21, by Medical Tribune, Inc., 880 Third Ave., New York, N.Y., 10022. Application to mail at controlled circulation rate pending at Vineland, N.J. 08360*
Subscription $25.00, Students $7.50.

In Men 25 to 44, More CHD Found in Blacks

Medical Tribune Report

NEW ORLEANS—Pathologists have been surprised by the discovery in a study here that in men 25 to 44 years of age coronary heart disease is more prevalent among blacks than whites.

Based on 423 autopsies in a 3-year period, the population rate for proven CHD was 74/100,000 for black men and 54/100,000 for white. If less strongly documented CHD cases are added, the statistics become 156/100,000 for blacks and 91/100,000 for whites. The autopsies represent 69 per cent of all deaths in the age group during the three years.

Dr. William A. Rock reported the findings to the International Academy of Pathology meeting here. Dr. Jack P. Strong, chairman of the department of pathology at the Louisiana State University Medical Center, who also participated in the investigation, said it had been believed earlier that the incidence of CHD was higher among whites.

Part of Community-Wide Study

The necropsies were of 138 white and 285 black men. The work is part of a community-wide comprehensive study of atherosclerosis and coronary heart disease.

Five pathologists used autopsy data and other information to make classifications in four categories. They listed 19 white and 18 black cases as proven CHD, five white and five black as probable CHD, 8 white and 15 black as possible CHD and 106 white and 247 black as without CHD.

Sixty-seven per cent of the CHD cases had large myocardial lesions. Eighteen per cent of questionable CHD (the probable and possible groups) had large lesions. Seven per cent of the non-CHD cases showed such lesions.

Coronary atherosclerosis was demonstrated in 59 per cent of the CHD category, in 31 per cent the questionable group and in 8 per cent of those without CHD.

Dr. Margaret C. Oalmann works with Drs. Rock and Strong in the New Orleans project, being carried on by L.S.U. and the Veterans Administration Hospital.

Doctors' Debate

MEDICAL TRIBUNE frequently receives extensive and well-documented communications from physicians on current subjects of controversy or those of great current medical interest. We invite contributions in these areas for presentation in this new feature.

The Edelin Case: Pros and Cons—Mostly Cons Among Letter-writers

Decadent Thinking?

Your editorial (MT, Mar. 12) reflects the decadent thinking of our society. Dr. Edelin is an guilty of homicide as I would be if I would hold your head in the swimming pool until you drown, which may not be such a bad idea after the editorial you have written. I am shocked and dismayed by the conviction of Dr. Edelin too, only in that he did not get a sentence commensurable with the crime which he has committed. When a physician deliberately drowns a baby, he can never be called innocent, no matter how you circumvent or define the term innocence or guilt. The plain fact of the matter is that drowning a baby is murder under any circumstances.

I also fully agree in the woman's right to have a baby if she so desires. However, if the baby is present in her house or in her uterus, she does not have the right to kill it for her convenience or for any other reason. Murder, by any name is murder.

You have misrepresented the "right to life people" by saying the prescribing of oral contraceptives is a potential charge of manslaughter. The right to life people, with whom I am familiar, do not make any stand on the contraceptions whatsoever and feel that the problem can be solved by limiting conception, rather than killing of babies.

I certainly hope that Dr. Edelin's conviction will begin to turn the tide of justice back towards a more life respecting attitude. You also stated you are against suicide but would not deny a person the right to take his own life if he believes that would give dignity and peace to his death. I think before we condemn a fetus to a brutal and inhumane death, we ought to ask him, that is, the fetus, if he desires to live or die. When we are capable of doing that and when we can get his consent, then we can allow abortion on demand. The demand can be made not by the mother, but by the baby, whose life is at stake.

PARNELL M. DONAHUE, M.D.
Hartford, Wis.

A Lie-Detector Test?

Regarding the Edelin article: the whole case seems to boil down to the word of Dr. Enrique Gimenez-Jimeno against the word of Dr. Kenneth C. Edelin.

It seems absolutely incredible to me that Dr. Edelin, in the presence of a physician whom he knew to be opposed to abortion ("Could not leave" [because] Dr. Penza and Dr. Edelin "were going to abort a fetus he thought might be viable, so he made a point of observing the hysterotomy"), would so obviously "insert his" entire hand "into the uterus and make the vigorous motion designed to detach the placenta." "Then," he said, "with his hands still inside the uterus but not moving, Dr. Edelin waited for at least three minutes" while watching the operating room clock across the room."

I wonder if Dr. Enrique Gimenez-Jimeno was required to take a lie detector test, and if not, why not?

WALTER W. STOLL JR., M.D.
University of Kentucky
Lexington, Kentucky

When Life Begins?

The following is a simple, straightforward, honest, scientific explanation of when my and your life began. It is not a Papist, Mormon or Orthodox Jewish interpretation—just cold logical indisputable facts!

When a female egg is fertilized by a male sperm an entirely new and separate individual is conceived. This is the period of conception or, more simply, the "coming together." The new individual has 46 chromosomes, half from the mother and half from the father, which unite in a very unique manner making this individual separate and distinct from both the mother and the father, yet with hereditary characteristics of both. The chromosomes determine the color of your eyes, the color of your skin, etc. Following conception, begins the greatest growth period of your life until your natural death.

Are you a human being? When your mother was expecting a child, she was expecting a human being. She did not have a dog nor a cat. Dogs have puppies and humans have children. There is no other way. Are you a being? Yes, being is the nominative of the verb "to be." You are living from the time of conception, otherwise, how could you grow and why would it be necessary to kill you if you are not living?

The Supreme Court said that if life began with conception, then abortion would be homicide. They then proceeded to ignore the facts and write their own infamous abortion decision. I know when life begins and now you do too.

JOHN HENRY ROWLAND, JR., M.D.
Jacksonville, Fla.

Surgical Justification?

I am amazed at the mass of printed and vocal medical opinion giving the impression that the medical profession in general feels Doctor Edelin was "doing his duty."

First off, probably a majority of doctors do not agree with abortion at any stage. From a scientific standpoint a fetus three months in utero is as alive as an infant three months out of the uterus.

Regardless of that point, with all of the tissue committees, review committees, etc., involved in preventing unnecessary operations, will you please explain to me the surgical justification of a Cesarean section done solely for the purpose of destroying a fetus in utero? A pregnancy at that advanced stage is clearly a uterus at term or approaching term. It is a major operation requiring considerable justification by medical review committees when performed for the purpose of delivering a normal term infant. How can you justify such a procedure for the destruction of an infant?

Please be advised that I for one have no medical or personal sympathy for Doctor Edelin. I think his act represented a crude, callous, materialistic thing that darkens the proud history of medicine's fight to preserve life.

Finally, as a surgeon, I do not think the operation was justified. It would have been less a threat to the mother's life to allow her to deliver normally and then to choke the baby to death.

JAMES T. JACKSON, M.D.
Dickson, Tenn.

Thanks to Medical Tribune

I wish to thank you for providing for the medical profession, your MEDICAL TRIBUNE.

Your recent editorials, and especially the one on "It Can Happen Here—Now," (MT, Mar. 19) have been immensely helpful. Your approach is straight-forward, systematically presented, and clear and concise conclusions, and especially appreciated by me.

. . . we have not had the experience in knowing and applying the admonition from the Mishna—"know how to answer the epicurean"—ie, the non-believer.

Again, our heartfelt thanks . . .

HAROLD M. SPINKA, M.D.
Chicago

Abortions for Money

With reference to your statement in the 19 March issue of MEDICAL TRIBUNE, "Any physician can 'keep covered' if he lets self-interest outweigh his social conscience and sense of humanity and performs *no* abortions," let us please get a couple of things straight. First, in 99+ per cent of the U.S., self-interest dictates doing abortions, not refusing to do them. Boston juries are enormously atypical, and even there, the vast majority of feticide artists are prospering. There and elsewhere, twenty minutes of work nets well over $300, as a rule. Considering the brief pre- and post-operative responsibilities, abortion pays better than neurosurgery, hour for hour. Small wonder that it has now become the second-most-commonly-performed operation in this country and threatens to become #1.

Secondly, I feel you do grave injustice to me and to the others who feel as I do when you suggest that social conscience and sense of humanity lead one to kill fetuses. It is precisely my conscience, social and otherwise, and my sense of humanity, which stays my hand. I am not a member of a church which proscribes abortion: I simply feel that nothing short of saving life can justify the taking of it.

In the future, please try to maintain a sense of fair play when editorializing against those whose views do not match yours.

THOMAS BLAIR CARLETON, M.D.
Gunnison, Colo.

Antitrypsin Deficiency Commonest in Whites

Medical Tribune Report

NEW YORK—Preliminary data from a study of 917 California seventh-graders reinforce the suspicion that Caucasians are at greatest risk of both an inherited deficiency of alpha$_1$ antitrypsin (A_1 AT) and the emphysema with which it has been linked, according to Dr. Jack Lieberman, of City of Hope Medical Center, Duarte, Calif.

In the first Julin M. Jones memorial lecture, sponsored by the New York Lung Association, he reported that all 25 of the students found to have deficiencies of A_1 AT were Caucasian, as were nearly 90 per cent of those discovered to have variants of A_1 AT molecules.

Dr. Lieberman also reported that to date, 19 families of students with severe or intermediate deficiencies have been tested, and that of 66 family members, 35, or 56 per cent, have been found to have deficiencies. He commented that the testing of family members of young people known to have A_1 AT deficiency offers hope for discovering potential emphysema victims before they develop clinical disease.

Dr. Lieberman stressed the importance of warning persons with the deficiency against smoking. Many studies suggest that emphysema may be prevented in those with intermediate deficiency "despite their unusual predisposition," he said, and the heterozygotes detected in the California screening program were counseled about the meaning of their inherited trait and told that they must not smoke cigarettes if they wished to reduce their chances of developing emphysema.

Gift to Cancer Center

Medical Tribune Report

NEW YORK—Three members of the Rockefeller family have agreed to contribute $4,950,000 to the building program and $1,000,000 for research at Memorial Sloan-Kettering Cancer Center here.

Pathologist Says Americas Knew TB 800 Years Before Columbus' Arrival

Medical Tribune Report

NEW ORLEANS—You can't blame Christopher Columbus or the Viking explorers for the introduction of tuberculosis into the New World—the disease was already here nearly 800 years before Columbus came, according to a University of Virginia pathologist.

In fact, said Dr. Marvin J. Allison, tuberculosis was common among the Incas and other natives of the Americas.

He told a meeting here of the International Academy of Pathology that there are numerous examples of primitive art in North, Central, and South Ameriea depicting the familiar hunchback suggestive of Pott's disease, and exhibited s picture of the fire god of the early Mexicsns, Huehue Teotil, as representative of possible bone lesions of tuberculosis.

Aside from art, Dr. Allison noted that the mummified body of an eight-year-old Inca bay, shown by radiocarbon dating to have died about 700 A.D., provided tissue samples proving tubercle bacilli in lung, liver and other organs.

Lesions have been demonstrated by x-ray in other mummies, he added, one of them excavated last year by himself and Peruvian associates in the Valley of Pisco, Peru. In all, he and scientsts of the Museum of Inca, Peru, havo studied abaut 100 mummies, he said.

Ceramic figure of early Mexican fire god Huehue Teotil shows that characteristic lesions of tuberculosis of spine were known long before Columbus.

EDITORIAL CAPSULES

... brief summaries of editorials or comments in current medical and scientific journals.

The Ideal Physician

"... in *J.A.M.A.* [228:1117, 1974], Dimond highlighted the desirability as well as the difficulty in selecting scientifically qualified medical students possessing the personal quality of compassion—a generally accepted characteristic of the ideal physician.

"... A recent student-teacher clinic provided a simple example for evaluating student bumanism, or its potential. A child aeurologist and I (a child psychiatrist) were teaching four medical students the key diagnostic features of a mongoloid cbild. As each of the students examined the cbild and ber epicanthal folds, noted the simian lines across her palms, demonstrated the laxaess of her joint ligaments and her muscular hypotonia, one of the students spoke up spontaneously: 'Shouldn't we have washed our hands before examining the child?' He was concerned about the suddcn and massive application of bacteria, etc., by 12 hands bolding, flexing, and rubbing over the nearly nakcd bnby. His sensitive concern wss for a possible consequence secondary to the primary cognitive examination activity itself. . . .

"This example is from the same cloth as that of the physician who warms the stethoscope, takes tbe time to explain in advance unfamiliar sensations to expect during an examination, or tells a patlcnt that erying with relief ls a beautiful thing—and then comfortably allows it to happon....

"The one common personality thread found in the fiber of an ideal physician may bo this educated sensitivity, this sympathic resonance with the patient, which does not affect tho physician's objeetivo decision making as macb as it affects his style and manner of readering his decisions or recommendations." *(Editorial, Richard E. Davis, M.D., Am. J. Psychiatry 132:3, Mar. 1975)*

Economics and Health

"Low man on the societal 'priority totem pole' is bealtb—even in good times. Now, with inflation and recession to bear, the low man will bo sacrificed. Msintaining good health through preventive medical practices, or seeking early medical care, becomes something which must be temporized. Man's inherent disposition to be concerned, to be responsive, becomes instead, indolent.

"When a nation's economy is historically strong, the preventablo physical and mental ills of society decline to the point where they may be considered quiescent. During periods of inflation and recession, these ills will begin to gestate and; long after tbe nation's economic convulsion, will exacerbate once again.

"Public bealth practitioners nationwide must double their efforts to prevent this future shock. NOW IS THE TIMB." *(Editorial, Ben Chalken, Amer. J. Public Health, 65:306, March, 1975)*

Developer of 'Heimlich Hug' Elucidates Physiologic Basis

Medical Tribune World Service

MONTREAL—The Heimlich maneuver—the forceful hug employed to try to pop food out of the mouth of a choking person and prevent death due to "cafe coronary"—produces an average ejected air flow rate of 205 L. s minute and an average pressure of 31 mm. of mercury, in healthy adults.

This physiologic basis for the maneuver was presented here to the Society of Thoracic Surgeons by the developer of the technique, Dr. Henry J. Heimlich, of the department of surgery and snesthesiology of the Jewish Hospital, in Cincinnati.

The physiologic findings, he said, "sccount for the elinical observation that a bolus which is totally or partially obstructing the airway is forcefully ejected by the maneuver."

Applied to Drowning Victim

Dr. Heimlich added that similar factors (substantial air pressure and the expelling of a lnrge volume of air from the trachea at a high flow rate) "are probably responsible for the expulsion of wster from the lungs when the method has been applied to a drowning victim."

A person choking on food is "in n phase of normal tidal respiration," Dr. Heimlich explained, "... and not likely to be swallowing food at the end of a msximum expiration." Therefore, there is a portion of the tidal air plus the entire expiratory reserve volume available for ejecting the bolus of food.

Here's how Dr. Heimlich describes his maneuver:

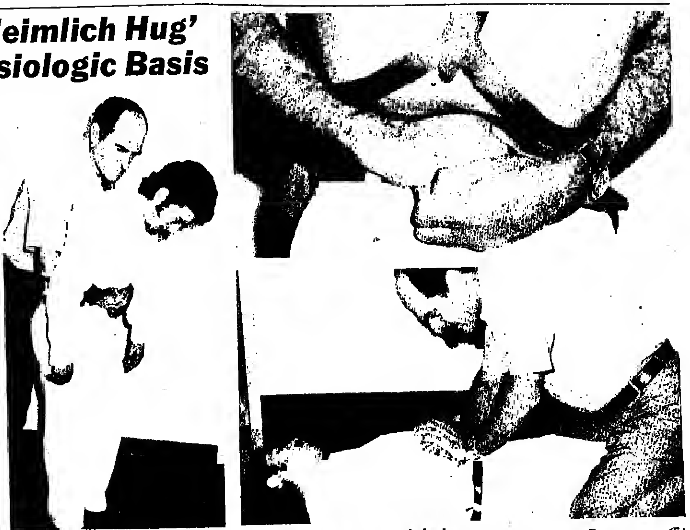
● When the victim is standing or sitting, stand behind him nnd wrsp your arms around his waist. Make a fist with one hsnd and grab it with the other. Place your fist above the victim's navel snd below his rib cnge, and press it forcefully into his abdomen with a quick upward thrust. Repeat seversl times if necessary.

● When the victim is lying on his bsck, face the victim, kneeling astride his hips. With one hand on top of the other, place the heel of your bottom hand on the victim's abdomen slightly above his navel and below his rib cage. Then press forcefully into the victim's abdomen with a quick upward thrust, repeating if necessary.

Children have less air volume, Dr. Heimlich said, but he added that hs has gotten reports of successful use of his msneuver in children whose ages ranged from nine to 15.

In children, he said, a smaller diameter of the trschea csuses increased resisisnce to air flow, resulting in adequste pressure despite the fact that a lesser volume of air is expelled.

"The anatomic basis for the function of the Heimlich maneuver has been established by... [this] observation," Dr. Heimlich said: "With a patient in the lateral position during thoracotomy, pressure applied by the surgeon's fist upward into the abdomen below the rib cage is seen to cause the diaphram to rise several inches into the pleursl cnvity."



Application of the Heimlich maneuver ts aid n choking person when victim is standing, above left. Top right, position af rescuer's hsnds for standing victim. Center, demonstration of maneuver with the victim supine. Bottom, position of rescuer's hsnds for supine victim. Quick upward thrust into abdomen is made.

Family Role Detected in Childhood Bronchitis

Medical Tribune World Service

ROTTERDAM, NETHERLANDS—Family influences including smoking appear to have a correlation with childhood respiratory disease, a British epidemiologist, Dr. John Colley, reported to the WHO Working Group on Management af Respiratory Diseases in Children meeting here.

Discussing his own recent research and that of others, Dr. Colley said that in one study involving over 10,000 children aged 6 to 10 it was found that 26 per cent of children with a bronchitic parent or siblings had a history of bronchitis, compared to 16 per cent in children without this background.

Dr. Colley, who is reader in pediatric epidemiology at the London School of Hygiene and Tropical Medicine, said the nature of the association is not yet clear. It may be due to a genetically determined susceptibility to respiratory disease in either or both parents, to the sharing of an adverse home environment, or to the transfer of respiratory infection from psrent to child, he said.

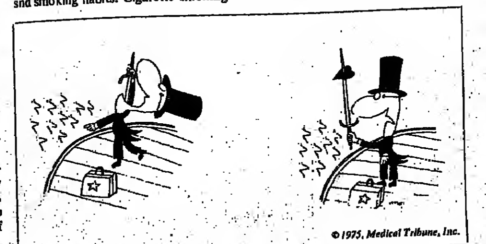
The smoking habits of psrents also correlate strongly with respiratory problems in children. Another study, of children aged 6 to 14, which was conducted in 1971 showed a cough prevalence three times higher where both pnrents produce winter morning phlegm. In a study last year in which follow-up was completed of 2205 infants and their families over the first five years of life investigators found that the risk of contracting pneumonia or bronchitis doubled for children whose parents smoked over 24 cigarettes a day.

It is clear from the investigation that "passive smoking" by the child has some effect, Dr. Colley commented. However, this seems to be most important in tho first year of life.

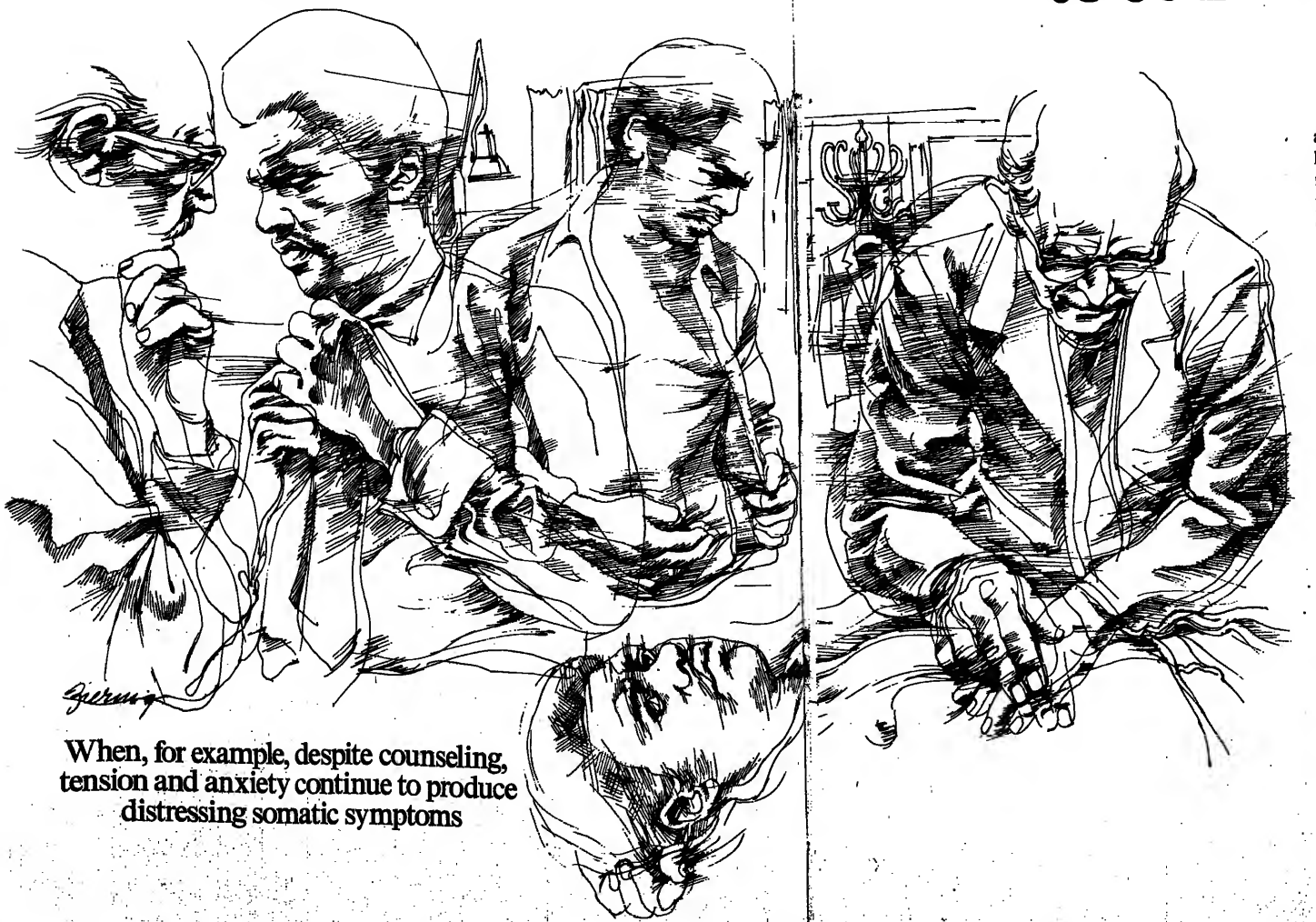
Somo pediatricisns doubt that childhood respiratory experience has any bearing on disease in later life, but Dr. Colley produced evidence pointing to such a link. Discussing a follow-up of the cohort of children born in the U.K. in one week in 1946 to the age of 25, he noted that during the first two years of life both social class and air pollution influenced the incidence of lower respiratory tract illness. Incidence rose in step with air pollution, and was higher in the children of manual workers than in those of non-manual workers.

At the age of 20, the cohort were questioned on respirstory symptoms snd smoking habits. Cigarette smoking was found to have sn important effect on chest symptoms; a chest illness under of the age of two also had a somewhat smaller effect. Air pollution and socisl class, however, did not appear to be significant at the age of 20 or 25.

Dr. Colley suggested that smoking by parents operates at two levels: by increasing the possibility of infection boing transmitted by cigarette-smoking parents' coughing and producing phlegm, and by "passive smoking" by children under one year.



If there's good reason to prescribe for psychic tension...



When, for example, despite counseling, tension and anxiety continue to produce distressing somatic symptoms

Prompt action is a good reason to consider Valium® (diazepam)

When your patient's somatic complaints are associated with tension and anxiety and you have tried counseling and other supportive measures alone, you may decide to prescribe psychotherapeutic medication. If you do, the question remains: which one?

Valium (diazepam) is one to consider closely. One that works promptly as an adjunct to continued supportive measures. One that generally produces significant improvement within the first few days of therapy, although some patients may require more time for a clearcut response.

Prompt action. One good reason to consider Valium.

And should you choose to prescribe Valium, you should also keep this information in mind. Valium is usually well tolerated. Patients taking Valium should be cautioned against operating dangerous machinery or driving. Therapy with Valium should normally be continued until the patient's psychic tension symptoms have been reduced to tolerable levels.

Please turn page for a summary of product information.

Valium® ROCHE
(diazepam)
2-mg, 5-mg, 10-mg tablets

The Only Independent Weekly Medical Newspaper in the U.S.

Medical Tribune
and Medical News
Published by Medical Tribune, Inc.

What Goes On?

THE traditional rights of physicians have of late been severely rocked by the riptides of conflicting commercial and governmental economic activities. One therefore begins to look with auspicion at actions whose purposes cannot be discerned upoo their surface.

The recent resolution of the Drug Research Board (National Academy of Sciences) regarding prescription practices is one such case in point. The mystifying situation surrounding this resolution was further compounded by another manifestation of the recent rash of irresponsible, inaccurate press releases issued by official or nonofficial governmental bodies and medical publications. The province of interest of a Drug Research Board would, if its title were indicative, appear to be research on drugs. The Board's relationship to tbe National Research Council nad the Assembly of Life Sciences would suggest also that its province was in the area of the life sciences and not economics or medical politics. In the light of the above, one examines the five points of o resolution passed on October 25, 1974, in Woshington, D.C.

The first "Whereas" related to the generalized truism that "the patient's welfare should be the ultimate goal of statutes and regulations concerning drug product selection."

The second "Whereas" acknowledges that the physician "must have the ultimate responsibility and authority in drug product selection." Agreed. Why this should need restatement ot this time is not clear and suggests thot something lny behind the resolution.

The third "Whereas" stated, "The pharmacist may, in some situations, have greoter knowledge of drug products than other bealth professionals, including knowledge of both quality and costs." This is a baffler. Here the Drug Research Board gets itself involved in what may be a debate as to the traditioal relationship between physician and pharmacist. Wbat this has to do with drug research is not clear.

The fourth "Whereas": "It is appropriate that decisions with regard to the choice of drug products be made by the bealth profeasional possessing the greatest amount of information involved in the particular selection in question, with the attendant accountabilty" seems to ua to be a reaffirmation of the physician's preeminent position aod responsibility in therapy.

The fifth point is, "Resolved, that the phyaician, having selected the chemical entity to be used for therapy, should be required either to delegate to the pharmacist, or explicitly to retain to himself, selection of the particular drug product to be dispensed and received by the patient." It would seem to be a resolution as unnecessary as it was uocalled for from tbe Drug Research Board. It is not clear why the Drug Research Board should come to such an affirmation. Does it have any research suggesting that there was a need for such a resolution? Wbat kind of clinical orientation leads to a conclusion that every drug product is a "chemical entity"?

Every physician today clearly indicates whether he explicitly "retains for himself the selection of a particular drug product to be dispensed" or whether he delegates that choice to the pharmacist by the manner in which he writes his prescription. The physician who prescribes a trademarked drug has explicitly selected the specific substance and manufacturer whose therapeutic agent he wants dispensed. The physician who writes a generic prescription clearly is delegating to the pharmacist selection of one of several drugs.

It would seem, therefore, that the resolution of the Drug Research Board, if it did more than affirm the existing situntion, had another purpose. If that purpose was to foster or advance the repeal of antisubstitution laws, then it would seem that a scientific body was lending its name and prestige for economic or political purposes to an action which would not only change the traditional relationship between the professions of medicine and pharmacy but erodes the major protection which exists—that n patient *gets* wlint his physician prescribes, and not u substitute. If the intent of the Drug Research Board was to protect patients in respect to their receiving precisely what the doctor wanted—either a specific drug or a generic drug, then it should have gone on to endorse the antisubstitution laws which exist to prevent any deviation from the intent of the professional who best knows the patient and who has the responsibility for his treatment. That intent can and is clearly expressed today in existing practice—and its fulfillment made possible by the teeth in the penalties that exist in the antisubstitution laws.

The reasons for the resolution of the Drug Research Board, the reasons for the erroneous press release which accompanied it, the reasons for the statement clarifying the October 25th resolution and the confusion and conflict which have followed have all resulted from an action whose intent would appear to be at this juncture inexplicable, to put it mildly. The medical profession needs clarificatioo and confirmation that its traditional prerogotives are not being undermined by quasi-goveromental and other bodies whose intent appears to confirm practices which already exist but whose effect would be to alter and destroy existing relationships—o goal which is not fundamentally scientific nor professional but one which is economic and which in effect challenges the rights and responsibilities of physicians.

A.M.S.

"I don't have any confidence in him either, and he's my husband."
© 1975, Medical Tribune, Inc.

LETTERS TO TRIBUNE

An Endorsement

I wish to commend Dr. Sackler in a general way for the marvelous editorials he has given us for a long time in MEDICAL TRIBUNE, and wish to heartily endorse the urgent message he has brought to us in the past two issues relating to the Edelin case and all of its implications.

I hope he will continue vigorously to call attention to these matters and their ultimate meaning for all of society, but particularly to the Medical profession. He has my heartiest congratulations.

CHARLES F. MORRELL, M.D., FACS
Long Beach, Calif.

No-Fault Insurance

Congressman Hastings' criticism of Senator Inouye's "No Fault Bill"—quated in MEDICAL TRIBUNE (April 2) is a gratuitous insult to the medical profession. One of his criticisms of this proposed legislation is thot doctors won't "have to be concerned any more as to the quality of medicine since there's automotic covcrage." Thore are many snide implications in such a statement, not the lanst of which is that there is better quolitative medicine when doctors have the fear of malpractise as a stabbing threat.

Note though how the real threot of eliminating the contingency fee in thia bill brings him to colleagues defense by raising the attenuated vis-a-vis of States vs. Federnl jurisdiction. Like "scparate but equal," Jury service," "voting eligibility?".

HARRY E. BELLER, M.D.
Miami, Fla.

A T&A? When?

I read with interest the recent article, "When to Do T & A? 30 Surveys Fail To Resolve Issue" (MT, April 2). Dr. Feldman and his colleagues are to be commended for trying to make some sense out of the morass of studies, allegations, diatribes, half-truths and quasi-religious beliefs surrounding this procedure. However, any retrospective study of a group of largely restrospective studies, no matter how sophisticated the polot-scoring, is doomed to inconclusivancss from the start. The fact is that almost everything about the operation had undergone much change in the past 50 years—who does it, how it's done, whether adenoidectomy or tonsillectomy or both are done the varying indicatians, etc., etc.

The wholesale "family-plan" T & A's done, the varying indicstions, etc., etc. to mastoiditis in 1920 bear little resemblance to the seleetive sdenoidectomy, myringotamies, and middle ear intubations done today after multiple ear infections and treatment—refractory seromucinous otitis media. Like the problem of duadenal ulcer, treatment of adenotonsillar-cum-middle ear disease has seen different approaches, ranging from "conservative" to surgery to radiotherapy, and while some of these approaches are "waning in elegance of rationale," the problem remains.

I was not disappointed in my expectation of the clarion call from Academe —for "a prospective, randomized, controlled clinical trial quantifying outcome by objective techniques." It has a fine ring to it, it is manifestly desirable, and it is totolly impossible in the real world. Given a child who can't breathe possibly because of adenoidal hypertrophy and who can't hear because of serous otitis media, who is to tell him that he will be a randomly selected control, and be treated "conservativally"? At what point does surgical treatment become "conservative" and non-surgical therapy "radical"? Each case must be individually scrutinized and treated to the best of the physician's ability, with the best theo avsilable treatment. To consign even one child to the vagaries of a statistical Kismet is to awaken echoes of the Tuskegee Study.

Tha answer is that there are no easy, consistently reproducible answers. An individual analysis by a knowledgable and competeot physician still remains tbe most dependable approach to this problem.

WILLIAM F. FLYNN, M.D.
New Rochelle, N.Y.

On Dispensing Drugs

For a long time I have been reading Dr. Sackler and enjoying it, but I believe his editorial, "On the Dispensing of Drugs" (MT, April 2), is the best thing I have seen.

Your well done article is plain enough that legislators and the public can understand it.

My thanks!

MAL RUMPH, M.D., F.A.C.S.
Fort Worth, Tex.

How—and Whether—to Provide Complete Cardiac Care in a Community Hospital

Medical Tribune Report

HOUSTON—Guidelines for the community hospital on how—and whether—to embark on programs of cardiac catheterization and cardiac surgery were outlined here to the American College of Cardiology by physicians whose experience with complete cardiac care in such a setting now totals nearly five years.

Staff members at Methodist Hospital in Lubbock, Tex., said they believe their results demonstrate that a community hospital can provide quality service plus the advantages of home surroundings, lower costs, and less disruption for families.

But the Lubbock group also emphasized during the symposium it presented that community hospitals should not attempt a full range of cardiac care unless specific criteria can be met.

Patient Population Size Vital

One essential condition is a patient population big enough to warrant the program and permit specialists to maintain their skills, according to Dr. Joe O. Arrington, a staff cardiologist and chairman of the symposium.

Equally vital, in his opinion, are community cooperation, a "well-motivated" administration and hospital board, and a "cadre of properly qualified and trained personnel."

The cardiac catheterization laboratory at Methodist Hospital opened in 1970 and an associated cardiac surgical program was established later that year.

More than 3,000 coronary arteriograms and some 900 heart operations have been performed at the institution, which now has 549 beds.

It takes a sizable staff to handle an annual volume of 1,000 coronary studies, Dr. Samuel M. King reported. He and Dr. Jay B. Jensen, who have been doing the cardiac catheterizations since the start of the program, agree that a basic crew of four people is advisable in addition to the performing physician.

These include the nurse in charge, a laboratory technician to operate the multichannel recorder and carry out various determinations, a special x-ray technician, and an operating-room technician.

"There is no doubt that we could probably eliminate one of these crew members but it would be at the expense of efficiency and personnel fatigue," Dr. King said.

Both physicians stressed their belief that the angiographer should be skilled in two methods of performing coronary studies—the Sones technique, which they have used exclusively in about 95 per cent of their cases, and the Judkins technique.

"The most important aspect of any technique," Dr. King commented, "is to know which one to employ when."

Reviewing results of the first 3,000 coronary arteriograms, Dr. Jensen said that five patients had died as a complication of the angiographic procedure.

Four of the five fit a common pattern, he noted. They had unstable angina, together with symptoms and signs of left ventricular dysfunction; either total or subtotal occlusion of the right coronary artery; and nearly total obstruction of the left main coronary artery.

Extremely Poor Prognosis

"Even in light of these mortality statistics for severe left main coronary disease," he added, "we feel that aggressive management is indicated because of the extremely poor prognosis with medical treatment."

Dr. Jensen sounded a strong warning, however, against the performance of invasive cardiovascular studies at any facility lacking an adequate caseload, good clinical facilities, and angiographers with experience as well as sufficient training.

Another symposium participant, Dr. Donald L. Bricker, cardiac surgeon at the Lubbock hospital, included the same cautions in a how-to-do-it prescription for the community hospital thinking of a cardiac surgery service. His specific recommendations:

- Evaluate needs and resources. Find out how many patients referred for catheterization subsequently need surgery. Know what the hospital can provide (space, financial support, personnel). Determine community attitudes—"if people are opposed to the program, they'll later say 'I told you so' if anything goes wrong."
- Establish a cardiac catheterization laboratory with a fully qualified and trained cardiologist.
- Recruit a cardiac surgeon with demonstrated expertise—"not someone just out of residency." Make sure that this surgeon is familiar with all aspects of cardiac surgery, has essential equipment, and is allowed to build a team of surgical assistant, nurse, anesthesiologist, and clinical perfusionist.
- Coordinate the intended program with the hospital administrator and a medical-surgical cardiopulmonary committee. Inauguration of cardiac surgery will require cross-training for in-house personnel, purchase of much equipment, modification of facilities, provision of special laboratory services, and blood bank support.
- Finally, don't underestimate the difficulties of setting up a cardiac surgery program since "Murphy's law will prevail." Even the best surgeon can experience trouble, Dr. Bricker noted, and the community hospital that plans to set up a comprehensive program must remember that it cannot then pick and choose among cases.

"Being 'just as good' as a referral center is inadequate," he said. "If you break lines of referral, you have to provide something the center doesn't. That means greater convenience, less cost, better results." F.G.

Staff at Methodist Hospital in Lubbock, Tex., believe their results show that community hospitals can provide quality cardiac catheterization, above, and cardiac surgery procedures with advantages of home surroundings and lower costs.

Delayed Correction Of Cardiac Rhythm Encountered in 3%

Continued from page 1

converted spontaneously to normal sinus rhythm.

In one case, Dr. Duvernoy said, there was possibly atrial dissociation, with one atrium continuing in fibrillation while the other was in sinus rhythm, but the leads used did not permit absolute proof. "The mechanism of delayed conversion in the other cases remains speculative," Dr. Duvernoy continued.

It has been shown that small energy shocks falling into the atrial vulnerable period will cause atrial fibrillation, Dr. Duvernoy said, and this is apparently an unstable mechanism that then reverts spontaneously to normal rhythm. It's also known, he said, that direct current shock causes an intense stimulation of sympathetic and parasympathetic receptors in the heart, causing a release of catecholamines and acetylcholine.

"These substances may influence the cardiac rhythm for a period of time following direct current shock and have been linked to the occurrence of post-shock arrhythmias," he said. Another possible mechanism, Dr. Duvernoy noted, is a partial depolarization of the atria following atrial stimulation with normal sinus rhythm occurring when a critical amount of synchronized atrial fibers is reached.

Better Understanding Urged Of Unique Stressors in Aged

Medical Tribune Report

NEW YORK—Improving the mental health of older people through counseling, preparatory training, utilization of skills, and treatment based on a better understanding of stress and aging was urged here by Dr. Stephen Nordlicht, Clinical Associate Professor of Psychiatry at Cornell University Medical College.

Stressors unique to the aged—the loss of loved ones, friends, position, income, health, and cognitive functioning—"are sufficiently severe to create serious consequences but can be ameliorated by the concerned physician's early assistance," he told the 169th annual meeting of the Medical Society of the State of New York.

Recognizing stress and the physiological factors involved in aging—"the breakdown of neural and endocrine integrative function, dropping out of functional units in vital organ systems, and loss of functional capacity of many cells in the body"—are the physician's prime concerns in dealing with older patients' problems, Dr. Nordlicht said.

"Priority should also now be given to acquiring a greater understanding of how the individual adjusts to the various changes in life," as well as how these life events create stress, he said.

Eradication of mistaken beliefs, particularly the "destructive" philosophy of remaining youthful at all costs, is also the physician's responsibility, he continued. This philosophy, he said, leads to the rejection of the older person and also to anxiety at the thought of aging.

"The mistaken belief that for most elderly people mental illness is inevitable" must also be changed through physicians' efforts, Dr. Nordlicht said.

He also made these points:

- Utilizing the skills of older people "will not only add to the economic strength of the community but also serve to dissipate the feelings of isolation and rejection. Probably it is not yet fully comprehended how dependent we are on our occupation for social acceptance."
- Preparatory training for growing old, similar to that for future mothers by obstetricians, should be carried out by qualified physicians. This would help the older person "to continue functioning independently and productively."
- The slowing of the perceptual and response processes is "bewildering, confusing, and painful" for the patient, and may lead to depression and even suicide. Help should be provided "when the stresses first begin, rather than delaying and then recognizing that we are too late."
- "Medical advances can only be successful if we also resolve the accompanying socioeconomic and behavioral problems. Longevity alone is no longer the only goal." M.H.

For Unwary Homeowner, Spring Is Accident Season

EACH SPRING the sun shines, the rain comes down, lawns and shrubs grow, and homes need repairs after the storms of winters. Result: thousands of emergencies for physicians and hospitals. Many of the accidents involve teen-agers of children working around the home without adequate supervision. Some numbers give an idea of the scope of the problem—50,000 injuries each year due to power lawn mowers, 356,000 on stairs, ramps, and landings, and 183,000 involving glass doors and windows. These figures represent injuries serious enough to require the attention of a physician; many millions of minor injuries go without such treatment. The accompanying photographs illustrate some typical examples of accident-provoking conduct in home maintenance situations.

Not only should products containing poisons be kept out of the reach of young children, but also older children should be made fully aware of the caution with which such products should be handled, above. Right, any use of ladders, especially around windows, should involve two persons—one to hold the ladder firmly. And no child should use a ladder unsupervised.

Dark stairs, above left, leading to cellars, garages, and storage areas frequently cause severe falls. Below left, power tools should be kept where young children cannot reach them. And teen-agers should work with unfamiliar tools only under close supervision. Below, power lawn mowers cause some of the most serious accidents. They should be operated with extreme care and only by those old enough to read and heed instructions and warnings.

We know Librium works.
(chlordiazepoxide HCl)

We're still learning more about how and why.

Value of continuing animal research

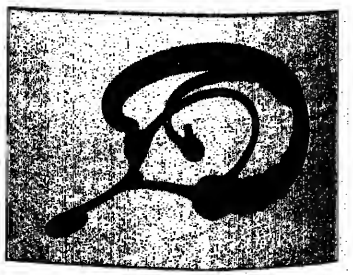
Clinical knowledge of Librium is extensive, yet its mode of action remains under continuing study. Data from animal experiments have been presented here for their intrinsic interest and because such findings often provide direction to new research, both experimental and clinical. *However, conclusions from such studies may not always be extrapolated to humans.*

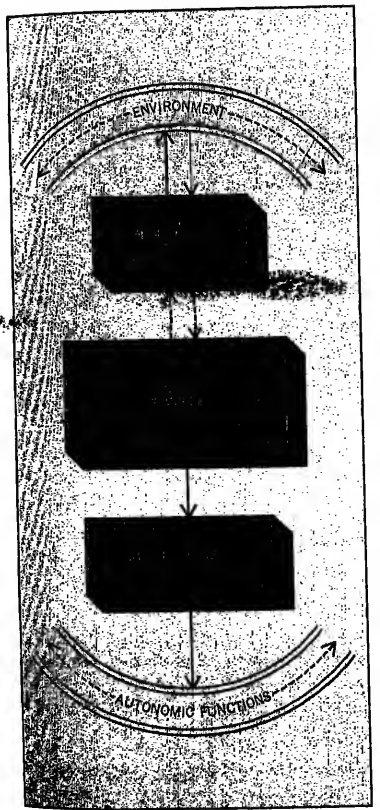
Is the limbic system the "Librium (chlordiazepoxide HCl) system"?

A great deal of experimentation on various animal species suggests that the limbic system is the principal site of action of Librium. Thus, in freely moving cats with electrodes implanted in the brain, Librium 5 mg/kg i.p. slowed electrical activity in the hippocampus, amygdala and septal areas but not in the neocortex which was significantly affected only at higher doses.[1,2] Current investigations on monkeys,[3,4] however, indicate that other subcortical structures may be implicated in the effect of Librium.

Other investigators, through electrophysiologic studies[5] in intact, conscious cats and monkeys, have demonstrated that chlordiazepoxide activates structures involved in the rewarding system—the preoptic area, lateral hypothalamus, septal region and hippocampal formation. At the same time, it appears to *inhibit* structures implicated in aversive behavior—the thalamic nuclei of the diencephalon and the midbrain reticular formation (MRF).

References:
1. Schallek W, Kuehn A, Jew N: *Ann NY Acad Sci* 96:303-312, Jan 13, 1962
2. Sternbach LH, Randall LO, Gustafson SR: 1,4-Benzodiazepines (Chlordiazepoxide and Related Compounds), chap.5, in *Psychopharmacological Agents*, edited by Gordon M. New York, Academic Press, vol. 1, pp. 173-178
3. Delgado JMR, Braschitta H, Snyder DR: Psychoactive Drugs and Radio-Controlled Behavior. Film presented at the 124th annual meeting of the American Psychiatric Association, Washington DC, May 3-6, 1971
4. Delgado JMR: Antiaggressive effects of chlordiazepoxide, in *The Benzodiazepines*, edited by Garattini S, Mussini E, Randall LO. New York, Raven Press, 1973, pp. 419-432
5. Guerrero-Figueroa R, *et al*: Electrophysiological analysis of the action of four benzodiazepine derivatives on the nervous system, *ibid*, pp. 489-511





Schema demonstrating hypothetical pathways of emotional activity and its related expression in laboratory animals.

Clinical significance of excessive anxiety

Anxiety, when inappropriate and immoderate, may not only have adverse psychologic effects but may also cause various somatic disturbances. Reduction of excessive anxiety thus contributes to relief of anxiety-linked emotional and physical disorders.

Antianxiety action of Librium (chlordiazepoxide HCl)

The dependable action of Librium has been demonstrated in the relief of excessive anxiety and tension occurring alone or in association with functional and organic disorders—usually without adversely affecting performance. Librium is often used concomitantly, when anxiety is a contributing or complicating factor, with certain specific medications of other classes of drugs, *e.g.*, cardiac glycosides, diuretics and antihypertensives.

Adjunctive use of Librium is recommended when counseling, reassurance or other nonpharmacologic measures alone are not considered sufficiently effective. When anxiety has been reduced to manageable levels, therapy with Librium should be discontinued.

Librium®
(chlordiazepoxide HCl)
5 mg, 10 mg, 25 mg capsules

ROCHE

We're still learning more about it to make it more useful to you.

Before prescribing, please consult complete product information, a summary of which follows:
Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.
Contraindications: Patients with known hypersensitivity to the drug.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards. **Precautions:** In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider, individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically. **Adverse Reactions:** Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.
Supplied: Librium® Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

ROCHE Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

One Man... and Medicine

ARTHUR M. SACKLER, M.D.
International Publisher, Medical Tribune

Mystification

Part II

The sophisticated misuse of simplistic approaches may arrest, it cannot advance, solutions to real problems, and there are real problems of addiction.[1] To single out the physician, his prescribing practices *["written into law as his exclusive prerogative"]* and his *"legal drugs,"* and to blame these and public and professional promotion, as Lennard *et al* do, is to disregard reality. Certainly biblical Lot's being drugged by his daughters was no consequence of psychoactive drug advertising. It is our impression that Hogarth's classic commentary on the devastation of gin preceded the advent of TV. The incredibly extensive use of bhang and marijuana in India and Africa and of derivatives of the poppy in the Middle East would be hard to correlate either with mass media promotion, pharmaceutical promotion, or physician prescription.

Lennard *et al*, in *Mystification and Drug Misuse*, touch on a subject of deep interest to me—the "epidemic" of hyperactive children or minimal brain damaged (MBD) children. My concern is heightened by my fear that MBD may have a large iatrogenic component, possibly related to the use of restricted diets, restricted salt, and diuretic agents in pregnancy; and to the deprivation of protein due to poverty or ignorance. For me, the primary focus should be the prevention of damage to mother and fetus—not a debate on the treatment of its consequences.

Data and Conclusions

I note Lennard *et al*'s quote of Esty: *"I have since found out from fellow pediatricians that parents are slipping the children sedatives too—they tell me it is quite common."* As one interested in hard data, I object with equal vigor to the use of anecdotal material or distorted references whether it be in pharmaceutical promotion or in professional publications. However, we have had enough debate on double blinds and statistical validity. Nonetheless, in evaluating any scientific document, the analysis of its data is, of course, obligatory.

Picture my mystification as to the following: I read on page 61 that Lennard *et al* studied *"twenty-eight discussion groups in which one of the participants in each group had been administered 50 mg of chlorpromazine (a not inconsiderable dose."*[2] Chlorpromazine is indicated primarily for the psychoses in much heavier dosages, with a clear admonition that it might take weeks to perceive an effect. Thus, understandably, we learn on page 62 that co-group members judged 45 per cent of placebo subjects to have received a tranquilizer and 10 per cent a stimulant; and as to the subjects on medication, 21 per cent were judged to have had none, and 28 per cent a stimulant.

Furthermore, *"psychiatrists were quick to inform us who among the subjects had in their opinions, received the active agent. They were more often wrong than not."*[2]

Drugs and Group Interaction

From the above it would seem that one could only conclude that either 50 mg of chlorpromazine given to these subjects in this situation had no effect or, perhaps more properly, that no conclusions could be drawn. Nonetheless, on page 86 (referring to the same original report, same journal, same year, same volume and same pages—H. L. Lennard, L. J. Epstein, and B. G. Katzung, "Psychoactive Drug Action and Group Interaction Process," *Journal of Nervous and Mental Disease*, 1967, 145: 69-78) the authors state:

"In our research we studied the effect of a single administration of a phenothinzine drug on patterns of interaction in seven 'natural' groups, each of which contained three persons. Only one member of each group was given phenothinzine. We noted a decrease of activity on the part of the 'drugged' member and a decrease in the number of communications addressed to him by the others. The other group members, each of whom was on a placebo, unfamiliarly increased the frequency of their interactions with each other."[2]

Reconciling Data

In an attempt to reconcile what was referred to on pages 86-87 with what was recorded on pages 62-63, we reviewed the original study. It was described as *"a pilot study, one of a series currently being conducted to assess the effects of psychoactive agents on social interaction processes."*[3] However, the authors' 1971 book refers neither to later, nor more extensive nor additional studies. No subsequent report has appeared.

The "mystery" resolves as follows: It was a single report of 21 subjects;[3] the study *"consisted of groups of persons who interacted regularly in their work or leisure setting, that is, worked in the same office or met regularly for lunch. They were drawn from a non-patient population and each group consisted of three subjects between 20-45 years of age. Seven such groups were recruited from the staff of a San Francisco nonpsychiatric hospital."* The investigators *"requested cooperation of the group for a total of one evening a week for four successive weeks."* Thus 7 groups (of 3 subjects each) times 4 weeks equals *"28 discussion groups"* (page 61). The subjects knew they were participating in a psychoactive drug experiment but apparently were "blind" as to who received active drug or placebo. Not surprisingly, the authors did not report any statistically significant discrimination by subjects between placebo and active medication. It would seem psychiatrists were also "blind"—they could not discriminate between the medication and placebo—*"they were more often wrong than not."*

Baffling Science

The data is interesting. Fifty-five per cent of placebo subjects thought they had a tranquilizer or stimulant and 49 per cent of subjects on medication were judged to have a placebo or stimulant. The authors, on the other hand, who do not state whether their observations were under double blind conditions, claim that their analysis based on *"the last 7 minutes of group interaction and 4 previously determined [sic] two-minute samples"* did find a difference even though the *"two-minute sampling of the interaction process does not yield very stable data."*[3] The latter were thus discarded and *"the behavioral data presented* [were] *therefore . . . based largely on the structured situation transcript."* The authors state in their 1967 paper: *"The small number of groups studied so far and the methodologic limitations already discussed caution us not to generalize too freely from the findings."* Yet both these data and conclusions were used for two papers and a hardbound book.

Frankly, after more than 120 published papers and thirty years participation in research, I must confess that some "science" baffles me. It is a "mystification."

1. The latter term, according to the National Commission on Marijuana and Drug Abuse, is drug dependence.
2. Mystification and Drug Misuse, H. L. Lennard *et al*, Jossey-Bass, Inc., San Francisco, 1971.
3. J. Nerv. & Ment. Dis. 145:69, July, 1967.

Medicine on Stamps

Albert Schweitzer

This year is the centenary of the birth of the 1952 Nobel Peace Prize winner. First a musician and theologian, at the age of 30 he decided to study medicine and become a missionary physician. After receiving his M.D. from Strasbourg in 1913, he went to Lambarene, Equatorial Africa, and started his hospital in a chicken coop. This slowly grew into a medical complex that became world-famous. Stamp issued by France.

Text: Dr. Joseph Klee
Stamp: Minkus Publications, Inc., New York

Rhinovirus Shedding Study Not Deterring Use of Aspirin

Medical Tribune Report

NEW YORK—A recent study showing increased virus shedding with aspirin treatment of rhinovirus infection is "interesting" and "provoking," according to clinicians interviewed by MEDICAL TRIBUNE. But, they agree, it does not have immediate clinical or epidemiological significance, and aspirin use by patients with colds should probably not be changed.

The study was performed at the University of Illinois College of Medicine by a team headed by Drs. Edith D. Stanley and George G. Jackson. In double-blind trials, volunteers challenged with RV21 or RV25 were treated with aspirin or placebo. Aspirin treatment was associated with "a moderate reduction in the frequency or severity of some symptoms," the authors found. Also, it "appeared to cause a highly significant increase in the rate of virus shedding in treated subjects."

Their study was reported in the March 24, 1975, *J.A.M.A.* The authors also speculated—in the "comment" section—that "although these data do not provide the proof for such a conclusion, aspirin treatment, which permits the person to stay on the job with more infectious secretions, should make him a greater epidemiologic hazard."

DR. HENDLEY

This speculation received wide coverage in the press and on radio and television. MEDICAL TRIBUNE interviewed a number of infectious disease experts to see what they thought of this possible implication.

Dr. J. Owen Hendley, of the University of Virginia Hospital in Charlottesville, called it "a good study with experimental colds." But he noted that unless the virus titers are known, the observation of "increased" shedding is not highly significant. He added:

"I feel that if aspirin is going to make you feel better I'm going to use it. And from our studies with rhinovirus, we've found the spread to fellow workers is not great."

Dr. Hendley said he is doing an ongoing study, now in its 12th year, of some 300 workers, working in the same room, in an insurance company regional headquarters. "The spread among them is almost nil," he said. "With rhinovirus, the home is the place where the action is."

DR. COREY

Dr. Lawrence Corey, acting director of influenza surveillance at the Center for Disease Control in Atlanta, said he thinks the study represents "an interesting observation with this virus in an experimental situation."

"But whether it applies to wild virus exposure is a different story, and whether this is epidemiologically an important phenomenon also needs to be evaluated," Dr. Corey added. He also noted that the study did not include virus titers, and this is important, he said, because "transmission is also a quantitative thing, not just a qualitative thing."

Dr. Corey said he would also like to see a study like this examine transmission rates—"among roommates of the volunteers, for instance"—at the same time that viral shedding is being monitored. And the study "is not going to change my thinking about the use of aspirin," he added.

'Any Conclusions Premature'

Dr. Vernon Knight, Chairman of the Department of Microbiology and Immunology at Baylor College of Medicine, said he thinks "it would be very premature to draw any conclusions whatever."

"People are more infectious with a cold the day they come down with it," he noted, "and for the moment I wouldn't change anything I'm doing. I don't see any clinical or epidemiological aspects of this."

And Dr. William Mogabgab, Professor of Medicine in charge of the section of infectious diseases at Tulane University School of Medicine, said his study with aspirin and rhinovirus type A did not support the findings of the Illinois group. "I don't think enough is known about the different rhinoviruses, so I don't think the studies are exactly comparable, but we did not find increased recovery in the aspirin group in our study. The incidence of virus recovery was the same in the groups we looked at."

DR. KNIGHT DR. MOGABGAB

"I would definitely continue to prescribe aspirin for a cold," Dr. Mogabgab added.

Dr. Anne A. Gershon, a virologist, and Associate Professor of Pediatrics at New York University School of Medicine, said that in terms of cold spread, she thinks the study has little significance. "I don't think an increase in shedding will necessarily increase spread," she said.

But, she added, "It really makes you wonder in terms of a broader meaning for all infectious diseases. Recent studies have shown that aspirin decreases lymphocyte response to antigens in animals, and in humans that it inhibits lymphocyte transformation. So the implication is that aspirin may prolong the course of an infectious disease."

Finally, Dr. Neil Blacklow, Associate Professor of Medicine at Boston University School of Medicine, echoed the comments of others, that the data appear not to be significant clinically "unless the virus titers are known."

"So it would be difficult to say at this point," Dr. Blacklow said, "just how meaningful this study is in practical terms."

H.P.

Rubella Vaccine Use Breaks 6-to-9-Year Cycle of Epidemics

Continued from page 1

by the New York University School of Medicine and the National Foundation-March of Dimes.

That level is too low to protect pregnant women, he declared, yet the proposed Federal budget "does not provide funds for the Center for Disease Control to furnish vaccine to states."

Pointing out that the Government pays less than a dollar a dose for the vaccine, Dr. Cooper said the cost of institutional care for one child affected by congenital rubella may amount to $12,000 or more a year.

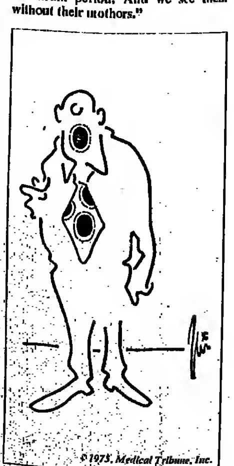
The investigator also expressed concern that many women of childbearing age do not know whether they are susceptible to rubella. He recommends that all such women ask their physicians for testing to determine their status.

Nearly 20% Not Immune

If they prove susceptible—and Dr. Cooper estimates that close to 20 per cent of women in this group are not immune—he advocates administration of the vaccine. It is obviously mandatory, he emphasized, to make sure the woman is not pregnant at time of vaccination and to warn her against becoming pregnant for three months afterword.

During the discussion period, a physician asked what can be done about the young teen-ager who comes with her mother for testing and immunization and denies any possibility of pregnancy. In two such cases in his experience, the questioner said, the girl was in fact pregnant (marriages were shortly announced), but fortunately, neither fetus was harmed.

Dr. Cooper's advice was succinct: "We bring girls in for susceptibility screening and immunization during the menstrual period. And we see them without their mothers."



Less Toxic Therapy Needed In Marrow Transplantation

Medical Tribune Report

NEW ORLEANS—The need for less toxic antineoplastic and immunosuppressive therapy for use in bone marrow transplantion has been underscored by the experience of patients at the Clinical Center of the National Institutes of Health.

Dr. L. M. Buja of the University of Texas Health Science Center, Dallas, reported to the American Association of Pathologists and Bacteriologists meeting here that all of the patients in the series on whom autopsies were performed revealed cardiac abnormalities attributed to the therapy aimed at preventing rejection.

The study covered 29 patients who underwent bone marrow transplantation between 1967 and mid-1974. Twenty-five had leukemia, three had aplastic anemia and one had metastatic bladder carcinoma. All but one of the patients died of post-transplant complications which included local infection or sepsis, graft-versus-host reaction, recurrent leukemia, interstitial pneumonia, hepatic failure and primary cardiotoxicity.

Thirty-four transplants were given. Prior to the procedure, patients received intensive therapy for the purpose of immunosuppression and tumor ablation. Modalities employed were total body irradiation, antilymphocyte serum, high-dose cyclophosphamide therapy, or cyclophosphamide supplemented by other drugs. Two patients received autologous bone marrow, two received marrow from identical twins and 25 received infusions of HL-A matched allogenic bone marrow. Nineteen patients received low doses of methotrexate, cyclophosphamide, or antilymphocyte serum in the post-transplant period.

Heart Weight Abnormal in 15

Cardiac abnormalities were documented in all 22 patients who were autopsied at the center. Fifteen had abnormal heart weights. Cardiohemorrhage occurred in 13. Six had focal myocardial lesions colonized by Candida organisms, and one had multiple staphylococcal abscesses. Five had fibrinous pericarditis. One showed evidence of cardiac involvement accompanying generalized hemosiderosis. Six exhibited a distinctive interstitial reactive change. Multifocal myocardial necrosis occurred in 13.

Scattered small foci of necrosis appeared related to shock in 10, and occurred in association with hepatic failure in one. Two exhibited extensive hemorrhagic myocardial necrosis, attributed to their cyclophosphamide.

Threatened Opium Shortage Materializes

By JAMES MAGEE
Medical Tribune World Service

GENEVA—Warnings by experts (MEDICAL TRIBUNE, Dec. 19, 1973) of a coming shortage of opium for medicinal uses have been confirmed as in fact happening by the International Narcotics Control Board.

The Board, which previously resisted suggestions that stocks were falling as a result of the restrictions on production that had been introduced in Turkey, said here that there is now a deficit of about 250 tons.

The Board's secretary-general, Joseph Dittert, ascribed the shortfall to climatic conditions that affected India's crop at the beginning of 1974.

"Because of heavy frost, production was below estimates," he told MEDICAL TRIBUNE, "and this shortage will probably continue until the middle of 1975. However, it will be balanced by Turkey's decision to begin producing poppy straw and releases to manufacturers from special stocks, as in the United States."

134 Tons Drawn From Stocks

Mr. Dittert noted that in 1973 the opium harvest was insufficient to meet the needs of morphine manufacturers, and 134 tons had to be drawn from stocks in order to supplement it. The gap was also made up by using quantities of seized opium.

The shortages of licit opium supplies are developing at a time when demand for alkaloid extracts, particularly in the U.S. but also in other manufacturing countries, is steadily increasing. Similarly, world demand for codeine has grown steadily. "These pressures are being generated by expansion of public health programs and the development of free medical services in both the economically advanced and the developing countries," Mr. Dittert commented.

A report by the Board for 1974 notes that intensive research is being conducted in several countries to increase yields and to find substitutes. Poppy-growing areas are also being extended. At the same time, several countries will continue to release opium from stocks.

There are doubts, however, whether these measures will be sufficient in the short term. The Board's report indicates that increased supplies of straw will be available from the end of 1975 onwards but adds that efforts to step up production should continue. "Opium stocks are very low, and the demand for codeine continues to rise," the report states.

US Biggest Codeine User

Statistics published by the Board for 1973 show that world consumption of codeine rose for the first time to 163 metric tons in that year, against an average of 154.5 tons for the three preceding years. The U.S. is now the largest consumer of codeine in absolute figures (33 tons in 1973), while Denmark and Finland are the largest per capita consumers (411 and 298 kg. per million inhabitants).

Mayo Investigator Stresses Rauwolfia Study's Limitation

Continued from page 1

475 women with cholelithiasis. Records of the women with breast cancer were then checked to determine how many had been treated for hypertension and what agents were being used.

Obviously, this differs significantly from a study that would examine rauwolfia patients and then determine the incidence of breast cancer among them.

It was found that 60 per cent of both groups of hypertensive women were untreated. This and other factors greatly reduced the number of women in the study.

Focused on 2 Small Groups

Ultimately the Mayo researchers focused on two relatively small groups. There were a total of 28 breast cancer patients—of whom 8 were on rauwolfia derivatives alone and 20 were on such drugs plus other antihypertensive agents. There were 38 women with cholelithiasis in the control group and 9 of them were on rauwolfia and 29 were on rauwolfia plus other agents.

"From our data it is not possible to see any difference between breast cancer and cholelithiasis," Dr. O'Fallon told MEDICAL TRIBUNE. "If the use of rauwolfia causes an increased risk in breast cancer, it must also proportionately increase cholelithiasis.

"We did, however, then make a preliminary examination of 50 women who had both breast cancer and cholelithiasis—and we found only three had used rauwolfia drugs—amounting to only 6 per cent. Now from this data it is not possible for us to see any difference between breast cancer and cholelithiasis. There is no difference between these two groups.

"If the use of rauwolfia increases the risk of both breast cancer and cholelithiasis, we would expect to see a higher percentage of rauwolfia users among women who had only breast cancer or only cholelithiasis.

"Therefore we find it unlikely that both diseases have an increased risk as a consequence of exposure to rauwolfia. However, we don't think we have settled the discussion. This is too small a group for that purpose."

Dr. O'Fallon and his associates are working on a much larger prospective study that may throw new light on the relationship of breast cancer, cholelithiasis, and hypertension as well as any possible relationship with rauwolfia derivatives.

A Cervical 'Dilatometer'

"Dilatometer," being developed by Timothy J. Kriewall, Ph.D., of the University of Michigan, measures cervical dilation during labor by using a magnet attached to one side of the cervix and a sensor attached to the opposite side.

Tribune Economic Analysis

Foreign Dumping Would Be Severe Blow to Economy

By ELIOT JANEWAY
Consulting Economist

The European and Asian economies competing with America are literally eating their surplus production of everything. They have already shut down their auto and appliance plants. They are only beginning to shut down the mills that produce their basic materials. But they have not yet slashed the export prices of the surplus they are stacking.

The clock is running out on how long the foreign plants ringing the industrialized world from Stockholm to Tokyo can hold the line on export price dumping. None of them will have any choice if the slump is still here by autumn.

When the American economy is clicking, the contribution it makes to world stability is to absorb the very surplus of foreign production that is now piling up. American industry can do very well without competing for markets abroad. But foreign industry will literally be out of business if the American economy does not open up in a matter of months to permit it to compete again with American industry for American customers.

In California, Japanese steel is selling for more than American steel is going begging for. This will not continue very long. Either steel-buying will come back inside America, in which case everything will come back, or Japanese steel will start looking for American customers at giveaway prices. In that tragic case, America's steel industry will follow her automobile industry into a traumatic shutdown.

Thanks to America's largesse, her competitors are well fortified with spare dollars needed to subsidize the dumping they haven't yet unleashed. If need be, they will buy the sales and the jobs needed to keep them afloat. If they are driven to "dump" their way back to work, they will sink the American economy as they do.

Now that the interest rate on T bills has dropped, do you think short-term municipal bonds are good bets? Do you call five-year municipal bonds the outer limits of short-term, or do you mean one year?

Chicago Physician

Short term municipals were the best investment value available when interest rates were up. They still are. By short term, I mean one year.

I have held onto my Pennsylvania Railroad stock because I just couldn't face the loss it entails, but now that the economy is falling on its face, maybe I should get whatever I can out of it. Would you advise me to do so?

Cleveland M.D.

You have answered your own question. Your Penn Central is worth more to you as a tax loss than as ongoing speculation.

Marriage Breakdown Said to Spur VD Rise

Medical Tribune World Service

GENEVA—Marriage breakdown, with consequent instability of sexual relationships, is becoming an important contributing factor in the increase in sexually transmitted diseases, according to a British psychiatrist.

Divorce figures have been rising steadily since 1958 in many countries, including the United States, United Kingdom, France, Germany, Japan, and the Soviet Union, and show a correlation with the statistical pattern of venereal disease, said Dr. Jacobus Dominian, of Central Middlesex Hospital, London.

Dr. Dominian, who was speaking here at a World Health Organization meeting on health education in the control of sexually transmitted diseases, said that there is as yet little direct evidence linking marital breakdown with VD because the phenomenon is of such recent origin. But the problem affects millions of human beings, he said, and is beginning to rank with other prominent social pathologies, including alcoholism, drug addiction, and delinquency.

3 Main Time Phases

He divided the pathology of marriage breakdown into three main time phases: the first five years of marriages; the period from the parents' early 30s to the departure of the children some 20 years later; and the period following the children's departure.

Dr. Dominian characterized the three phases in this way:

- In the first, and often most crucial, phase of marriage, there are two types of problem, physical and psychological. Difficulties may include nonconsummation or failures in erection and ejaculation, and lead to unsatisfied desire or a search for reassurance.

Pregnancy is another high-risk time. If sexual activity is reduced, the man may begin extramarital relationships, which, if they lead to VD, put both mother and child in danger.

In the postpuerperal syndrome, a small but significant proportion of women develop forms of moderate depression, irritation, tension, and loss of sexual desire. This also may induce the partner to seek sexual satisfaction elsewhere.

The two main psychological difficulties are psychopathy and the identity crisis. The psychopathic partner shows little affection but is often sexually demanding and easily becomes promiscuous. A person suffering from an identity crisis in youth may discover that the marriage partner is irrelevant to the self as it develops years later.

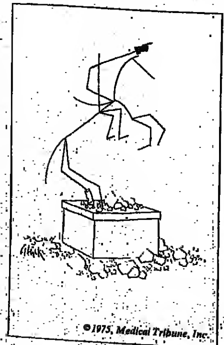
- In the 30-50-year age phase, one of the common patterns is a change in personality, often by the wife. She starts her marriage in a state of emotional dependence and compliance, but, as she grows older, begins to question her husband's dominance. If this leads to conflict, she may withdraw sexually and seek extramarital partners as a sign of defiance. The husband may then retaliate by also seeking other partners.
- The third phase, from 50 until death, is a phenomenon of this century, when two or more decades have been added to the life span. Previously, widowhood commonly preceded possible divorce.

The principal sexual problem at this stage is male impotence that is age-related and likely to become increasingly serious. If it persists continuously for more than two or three years, the prognosis is poor. So the search for aphrodisiacs begins, and both partners also consider taking other lovers to provide reassurance.

"A great deal of counseling is needed to help such a couple. The wife has to understand that no other woman is displacing her, and the husband has to learn to accept his disability and compensate with extra affection for the wife."

Another of the phenomena of this age group is the reaction by either the husband or wife to the realization that the end of life is approaching.

"After having lived meticulous and conventional lives, they will suddenly experience the desire for a late sexual fling and try to recapture the emotional excitement of adolescence."



Clinical Trials

By Oldden

CAR CLINIC

Is Leasing a Better Way to Go?

By Dr. John McDermott
Medical Tribune Consultant

The courts will soon decide if banks may operate a new service, auto-leasing, which many physicians have turned to for their transportation needs.

IRS guidelines for automobile deductions exclude cars used for pleasure or driving to work. However, the average physician's business car is one that does fulfill the criteria for a tax deduction. The IRS itself feels that there might be a tax advantage for persons who lease a car and then use it more than 50 per cent of the time for business. In other words, roughly 50 per cent use of an automobile for professional reasons might make leasing worth considering.

In contrast to desirability of leasing is the fact that certain automobiles, as well as certain drivers, may not make leasing advantageous, regardless of the amount of business use the vehicle gets. Cars that by nature of demand maintain high resale values tend to have less tax benefit to their owners when obtained on a lease basis. Similarly, owners who take excellent care of their automobile and at time of trade-in have "cream puffs" also will not find leasing particularly to their advantage. Most leasing arrangements are based on deterioration of the car to a greater degree than these drivers will tolerate.

Open vs. Closed-End Contracts

Basically, there are two types of leases. With the open-end contract, a person leases a car for an established period of time and pays for the car's expected depreciation on a monthly basis. With this type of lease the owner must be able to guarantee that the car will be worth the difference between its original value and its value at the end of the lease. In recent years, this type of lease has been fraught with difficulties, particularly if the automobile was a large gas-guzzler because the market for this type of car has become very bad. The lessee can end up paying for changes in market mood as well as the depreciation of the automobile itself.

The second type of lease, the closed-end lease, is different in that the leasing company agrees to take the car back at the end of the lease and there is no worry concerning its value. These leases, however, are usually more expensive than the open-end type, and the consumer is the one who always must take the gamble.

Where to Lease?

As mentioned above, banks are now into the leasing business and have joined the ranks of the automobile dealers, the automobile corporations themselves, and, of course, the auto-leasing companies. No hard, fast rule can be made as to the best place to obtain a lease. However, the Better Business Bureau and local consumer protection agencies may well be able to tell you where *not* to lease. In general, companies involved in the sale of the vehicle itself tend to have as much interest in unloading the particular vehicle as in the financial arrangements. Thus, with interest being divided, this can be a financial advantage to the customer. However, leasing through an independent company does offer some leverage if, for example, there is difficulty with the vehicle itself.

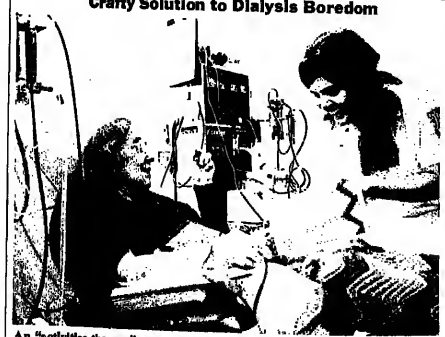
Repair Problems

Auto-leasing was long thought to be the panacea for the motorist faced with troublesome repairs. In early leasing arrangements it was common to guarantee the vehicle in an established condition of operation. Thus, when repairs were necessary, the lessor merely dropped off the sick car for a well one.

Unfortunately, this type of automobile "HMO" is no longer commonly available. Today most leased automobiles are repaired in the same fashion as any other owned automobile, but some, however, must, in addition to being repaired at the owner's expense, be repaired in the lessor's garage. The implications of this, of course, need not be elaborated.

Auto repairs are enough of a problem without one being saddled to having repairs made in any one particular garage. For this reason, and the problems alluded to above, it is very wise to shop for an auto lease, and either have the contract examined by a professional or take the time to read the small print yourself.

Crafty Solution to Dialysis Boredom



An "activities therapy" program has been started for patients undergoing kidney dialysis at Long Island Jewish-Hillside Medical Center, New Hyde Park, N.Y. Finding that boredom was common during the three-to-five-hour stretch needed for dialysis, volunteers have been teaching some of the patients crafts that can be performed with one arm and playing games with others.

House Staffers Eye Exit In Insurance Cost Crisis

Medical Tribune Staff

NEW YORK—A questionnaire survey of house staff officers in New York City has shown that 32 per cent are planning to leave New York State at the end of their training due to high malpractice insurance costs.

Another 40 per cent told the Committee of Interns and Residents that they would "probably" leave. Only 10 per cent of the 878 house staff responding said they would be able to stay if insurance rates increase.

Strong Interest Evidenced in Psychobiology

Medical Tribune Report

BOSTON—Heightened interest of clinical psychiatrists in the genetic and physiological origins of mental disorders was evidenced when an overflow audience of 600, many of them clinicians, attended a day-long symposium on the biological substrates of mental illness at McLean Hospital here.

The occasion was the announcement by the hospital of plans to construct a psychobiological research center.

The audience was so large that the meeting had to be transferred to the hospital's gymnasium, with some persons able to hear the speakers only over closed-circuit television in an adjoining room.

The planned research center will combine efforts now underway separately at Harvard, the Massachusetts Institute of Technology, Massachusetts General Hospital, and McLean, under the direction of Dr. Seymour Kety, who is Professor of Psychiatry at Harvard.

The Pendulum Swings

In discussing what he called a "really remarkable increase in interest" in the biological bases for mental disturbances, Dr. Kety told MEDICAL TRIBUNE after the meeting that "in a field where we don't know the answers, the pendulum of attention always swings back and forth" while the main body of work moves forward.

"The biological field held sway 60 or 70 years ago," he said, "and then 25 years ago the pendulum swung toward analysis. Ten years ago it went toward community psychiatry and an overriding interest in society and its ills."

At that time, he recalled, a similar meeting at McLean drew only 200 persons, almost all of them in research.

"The reasonable, sensible psychiatrist always thought, however, that mental illness was an interaction between biology and life experiences."

Interest in the biological side began again to increase several years ago, Dr. Kety recalled, as researchers began to come up with a data base instead of dogma and some "handles" on the problem of mental illness.

3-Drug Combination Reduces MS Relapse Rate Significantly

By Alan Fitzgibbon
Special Tribune Correspondent

BETHESDA, MD.—Fourteen multiple sclerosis patients experienced a significant reduction in relapse rate when treated with combined azathioprine, antilymphocyte globulin (ALG), and prednisone to achieve intensive immunosuppression, a British investigation has found.

Most of the patients had the intermittently active type of the disease, Dr. Eugene M. Lance, who now practices in Honolulu, told an MS symposium held by the National Institute of Neurological Diseases and Stroke.

"Using patients as their own controls, there was found to be a significant reduction in the relapse rate compared with the number predicted on the basis of their experience before treatment," he said.

"Many patients underwent relapses a few weeks or months after significant drug reduction, and for this reason some required continued immunosuppressive treatment, though all drugs have been withdrawn in most cases."

The 14 patients, 12 of whom had active multiple sclerosis when the experiment started and 10 of whom had had the disease for three years or less, were given 3 mg./Kg. of azathioprine daily throughout the first year of the trial. They received 500 mg. of ALG intravenously on the seventh day of the experiment and on weekdays of the following three weeks. Prednisone was begun at a dose of 200 mg. a day and tapered rapidly to 20 mg. a day by the seventh day.

All patients received an intravenous infusion of aggregate-free normal horse IgG on days 1 and 4 in doses of 60 and 30 mg./Kg., respectively.

Reactions Linked to Prednisone

After their discharge from the hospital the patients were maintained on 20 mg. of prednisone and 3 mg./Kg. of azathioprine daily, but at the end of the year those doses were cut down in preparation for complete withdrawal.

A few of the patients developed adverse drug reactions, mostly minor and related to the prednisone. One patient developed signs of serum sickness, which required cessation of the ALG treatment, and another developed mild anaphylactic symptoms, requiring reduction in ALG dosage.

Three raters who evaluated the patients' progress using a four-point scale of sensory and motor modalities, balance, speech, and vision, agreed that during the first two or three weeks of treatment every patient improved, especially during the first few days of ALG therapy.

"The degree and nature of improvement varied greatly, and in a few cases symptoms of many years' standing improved," Dr. Lance said.

His co-workers at the Clinical Research Centre, Harrow, were Drs. J. Abbesh, M. Kremer, V. Jones, and S. Knight, and Sir Peter Medawar.

MSS, HL-A Genes Linked

► Dr. Milton Alter reported that an analysis of HL-A tissue types in nine families each having at least two persons with multiple sclerosis indicated that a hypothesized gene responsible for susceptibility to the disease, which he termed the MSS gene, may be closely linked to the HL-A genes and may be associated with or the same as the immune response gene.

"Our genetic analysis implicated a dominant gene in determining multiple sclerosis susceptibility or a defective gene determining multiple sclerosis resistance," said Dr. Alter, who is chief of the neurology service at the Minneapolis Veterans Hospital.

Contradictory Studies Noted

"The results were clear-cut and therefore hard to reconcile with other genetic analyses of multiple sclerosis in which evidence of simple Mendelian inheritance was lacking. It is likely that the genetic susceptibility to multiple sclerosis, or lack of resistance, requires an environmental trigger, and not all genetically susceptible individuals develop clinically manifest multiple sclerosis.

"Alternatively, there might be a modified gene which operates to suppress the effect of the postulated MSS gene. Lack of an environmental trigger or the modifying gene may explain the exception that we noted among the sibs in the 'G' family, where one individual with the appropriate haplotype was nonetheless normal, as well as the observation that most cases of multiple sclerosis are sporadic rather than familial."

The exception that Dr. Alter noted was an apparently unaffected woman in her early 30s who had inherited the same haplotype as her affected siblings.

"She is still in the age at risk," he commented, "and may therefore inherit multiple sclerosis to make this what appears to be a virtually perfect segregation" of HL-A types.

Dr. Alter's co-workers were Mary Harshe, of Dr. Alter's service, and Dr. Edmond J. Yunis, of the University of Minnesota.

Transfer Factor Tested

► Dr. Torben Fog reported that a pilot test of transfer factor is being carried out in his Kommunehospital in Copenhagen to determine whether a larger double-blind trial with the hard-to-get substance is warranted.

"If there is demonstrable progress [of MS] during the one to two years of treatment, we may conclude that there is reasonable doubt about continuing this study," he said. "If not, the need of enough substance for a double-blind trial is imperative."

Ten multiple sclerosis patients were entered in the test between February and June last year. No side effects have so far been found but the treatment appears to reverse the patients' migratory inhibition factor reaction test results only temporarily. No definite conclusions about the progress of their disease could as yet be drawn.

Bullet in Heart Removed by 'Basket' Catheter

A .22-caliber bullet was removed from a man's heart and drawn out through a vein in his arm by means of a catheter with a collapsible fine-wire "basket" at Harper Hospital in the Detroit Medical Center. In this photo, the bullet has been snared by the catheter and is being lifted up inside the heart.

IMMATERIA MEDICA

May 6, 1856: Happy Birthday

We don't know if your local psychoanalytic society came up with a birthday cake but May 6 was the birthday of Sigmund Freud, M.D., the first physician to write a good book about humor but not the first to be funny. He got around to writing *Jokes and Their Relation to the Unconscious* (1905) because his friend Dr. Wilhelm Fliess, on reading proofs of *The Interpretation of Dreams*, complained that the dreams were too full of jokes. That led Freud to start studying jokes; he just couldn't let a free association slip by.

Jokes and Their Relation to the Unconscious has disappointed more comedians than Hollywood because it is no secret fountain of joyous boffos topping joyous boffos. It is a somberly technical study of jokes, wit and humor and their purposes, most of which are unconscious. But for our birthday jubilee, we dug it out and offer some samples. One was what Freud called "an American anecdote." It seems that two unscrupulous businessmen had amassed large fortunes and wanted to get into "good society" by having their portraits painted by a celebrated artist. Then they threw a large dinner party, inviting all the best people including a great critic and influential connoisseur. They themselves led the critic up "to the wall upon which the portraits were hanging side by side, to extract his admiring judgment on them."

"But where's the Saviour?" asked the critic. As Dr. Freud pointed out, the critic thus said what he didn't dare say openly through an allusion to Christ on the cross between two thieves.

The Baroness' Cries

We'll pass over why Freud called this an American joke to go on with another in which a Baron summoned a leading physician to deliver his wife. The physician, after looking in on the Baroness, suggested that he and the Baron play cards—much to the Baron's astonishment. They played—until a cry of pain from the Baroness—"*Ah, mon Dieu, que je souffre!*"—caused the Baron to jump out of his chair. The physician waved him down: "It's nothing. Let's go on with the game." A little later the pregnant woman cried: "*Mein Gott, mein Gott! What terrible pains!*"

As Dr. Freud tells it, at that point, the anxious Baron asked: "'Aren't you going in, Professor?' The physicist: 'No, no. It's not time yet.'

"'At last there came from next door an unmistakable cry of 'Ah-ee, ah-ee, ah-ee!' The doctor threw down his cards and exclaimed: 'Now it's time.'"

That joke, said Dr. Freud, showed how the cries of pain of an aristocratic lady in childbirth changed their character little by little, with pain causing primitive nature to break through all layers of education. It also showed "how an important decision can be properly made to depend on an apparently trivial phenomenon."

So you now know what kept Dr. Freud off the vaudeville circuits, the TV networks of our childhood. What has always bothered us is how a physician so quick to detect sexual puns picked a name like psychoanalysis for his newly-invented specialty; after all, psychoexamination was available.

But anyhow, *Happy Birthday, Dear Sigmund!* You've kept the comedians, the cartoonists, the novelists, the playwrights—and now the psychohistorians, not to mention a growing number of medical specialists—going in this grim 20th Century-Fox world, despite two World Wors, the Knrean and Vietnam Wars, depression, starvation, Watergate, pollution, moonshots, television, and sex therapy.

Unlike Dr. Fliess, we don't think there were enough jokes in *The Interpretation of Dreams*. We had hoped it would be a real boffo, the Disneyland of Medicine with Sophia Loren playing Botticelli's Venus on the Half-shell. She comes in and you say, "Lie down on the couch, young lady, I'm the doctor here . . ." And she says, "Don't get funny with me," and you woke up laughing.

Instead Dr. Freud says you love your mother. Or father. Some joke, Dr. Fliess.